

METHOD, SYSTEM, AND PROGRAM FOR MANAGING DATA  
ORGANIZATION

ABSTRACT

5            Provided are a method, system, and program for constructing data including  
reconstructing data organized in a data organization type, such as a Redundant Array of  
Independent Disks (RAID) organization, for example, which permits data reconstruction.  
In one embodiment, blocks of data are transferred from a stripe of data stored across  
storage units, such as disk drives in a RAID array, to a logic engine of a storage  
10   processor, bypassing the cache memory of the storage processor. A store queue performs  
a logic function, such as Exclusive-OR, on each block of data as it is transferred from the  
disk drives, to reconstruct a block of data from the stripe. The constructed block of data  
may be subsequently transferred to a disk drive of the RAID array to replace a lost block  
of data in the stripe of data across the RAID array or to replace an old block of parity  
15   data.